

Amendment
Serial No. 10/671,218

IN THE CLAIMS

Please amend the claim as follows:

1. (Currently Amended) A subscriber optical distributor for a broadcasting-telecommunications convergence service over an FTTH (Fiber To The Home) optical transmission network, said distributor comprising:

an optical transceiver ~~for configured to receiving~~ an optical TDM (Time Division Multiplex) broadcasting-telecommunications optical ~~signal, to converting~~ the optical broadcasting-telecommunications signal to an electrical broadcasting-telecommunications signal, and to converting an uplink electrical signal received from a subscriber to an optical signal;

a broadcasting/telecommunications signal distributor ~~for configured to receiving~~ the electrical broadcasting-telecommunications signal, and ~~for configured to separating~~ the received electrical broadcasting-telecommunications signal into a separate broadcasting signal and a separate telecommunications signal for further distribution, and configured to output the separated broadcasting signal and the separated telecommunications signal to separate destinations;

a broadcasting interface ~~for configured to interfacing~~ with the broadcasting signal received from the broadcasting/telecommunications signal distributor; and

a telecommunications interface ~~for configured to interfacing~~ with the telecommunications signal received from the broadcasting/telecommunications signal distributor, and providing the uplink signal to the optical transceiver.

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2. (Currently Amended) The subscriber optical distributor of claim 1, further comprising a broadcasting controller ~~for~~ configured to receive channel selection information regarding the subscriber from the broadcasting interface, and providing the channel selection information to the broadcasting/telecommunications signal distributor, so that only broadcasting data for a selected channel is output.

3. (Original) The subscriber optical distributor of claim 1, wherein the optical transceiver is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

4. (Original) The subscriber optical distributor of claim 2, wherein the optical transceiver is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

5. (Currently Amended) The subscriber optical distributor of claim 3, wherein the VCSEL transceiver comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, for receiving the TDM broadcasting-telecommunications signal; and

a transmitter ~~for~~ configured to uplink an Ethernet ~~uplink~~.

6. (Currently Amended) The subscriber optical distributor of claim 4, wherein the VCSEL transceiver comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

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a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, ~~for~~ configured to receive the TDM broadcasting-telecommunications signal; and

a transmitter ~~for~~ configured to uplink an Ethernet uplink.

7. (Original) The subscriber optical distributor of claim 1, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separating the time frame data into broadcasting data and Ethernet packet data.

8. (Original) The subscriber optical distributor of claim 2, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separating the time frame data into broadcasting data and Ethernet packet data.

9. (Original) The subscriber optical distributor of claim 3, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal using an internal PLL (Phase Locked Loop), and separating the time frame data into broadcasting data and Ethernet packet data.

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10. (Currently Amended) A method for ~~providing a optical distributor to a subscriber~~ receiving-broadcasting-telecommunications convergence service to a subscriber over an FTTH (Fiber To The Home) optical transmission network, said method comprising:

(a) receiving an optical TDM (Time Division Multiplex) broadcasting-telecommunications ~~optical~~-signal from an optical transceiver, converting the optical broadcasting-telecommunications signal to an electrical broadcasting-telecommunication signal,

(b) receiving the electrical broadcasting-telecommunications signal that has been converted by the optical transceiver into an electrical signal;

(c) separating the received, electrical broadcasting-telecommunications signal into a separate broadcasting signal and a separate telecommunications signal ~~for further distribution;~~

(d) outputting the separated broadcasting signal and the separated telecommunication signal to separate destinations;

~~(d)~~-(e) interfacing the broadcasting signal with a broadcasting interface;

~~(e)~~-(f) interfacing the telecommunications signal with the telecommunications interface,

and

~~(f)~~-(g) providing an uplink electrical signal received from a subscriber to the optical transceiver for conversion.

11. (Currently Amended) The method according to claim 10, further comprising:

~~(g)~~-(h) providing a broadcasting controller for receiving channel selection information regarding the subscriber from the broadcasting interface, and ~~(h)~~-(i) providing the channel selection information to the broadcasting/telecommunications signal distributor, so that only broadcasting data for a selected channel is output.

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12. (Currently Amended) The method according to claim 10, wherein the optical transceiver used in steps (b) and ~~(f)~~-(g) is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

13. (Currently Amended) The method according to claim 11, wherein the optical transceiver used in steps (b) and ~~(f)~~-(g) is implemented as a VCSEL (Vertical Cavity Surface Emitting Laser) transceiver.

14. (Original) The method according to claim 12, wherein the VCSEL transceiver used in the method comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier, for receiving the TDM broadcasting-telecommunications signal; and

a transmitter for an Ethernet uplink.

15. (Original) The method according to claim 13, wherein the VCSEL transceiver used in the method comprises:

an analog broadcasting receiver having a PIN-PD (Photo Diode) and an LNA (Low Noise Amplifier);

a broadcasting-telecommunications signal receiver having a PIN-PD and a transimpedance amplifier for receiving the TDM broadcasting-telecommunications signal; and

a transmitter for an Ethernet uplink.

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16. (Original) The method according to claim 10, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separates the time frame data into broadcasting data and Ethernet packet data.

17. (Original) The method according to claim 11, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal, and separates the time frame data into broadcasting data and Ethernet packet data.

18. (Original) The method according to claim 12, wherein the broadcasting/telecommunications signal distributor receives the broadcasting-telecommunications signal from the optical transceiver, extracts time frame data and a clock signal of TDM from the received broadcasting-telecommunications signal using an internal PLL (Phase Locked Loop), and separating the time frame data into broadcasting data and Ethernet packet data.